

EXHIBIT 1

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UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

SAN FRANCISCO DIVISION

GOOGLE LLC,

Plaintiff

v.

SONOS, INC.,

Defendant.

Case No. 3:20-cv-06754-WHA

**GOOGLE LLC’S TENTH SUPPLEMENTAL OBJECTIONS AND RESPONSES TO
PLAINTIFF SONOS, INC.’S FIRST SET OF FACT DISCOVERY INTERROGATORIES
(NO. 5, 9, 17, 21)**

Pursuant to Rule 33 of the Federal Rules of Civil Procedure, Defendant Google LLC (“Google”) hereby objects and responds to Plaintiff Sonos, Inc.’s (“Sonos”) First Set of Fact

1 GOOG-SONOSNDCA-00070785, GOOG-SONOSNDCA-00070790, GOOG-SONOSNDCA-
 2 00070792, GOOG-SONOSNDCA-00070794, GOOG-SONOSNDCA-00070795, GOOG-
 3 SONOSNDCA-00070797.

4 **Additional Accused Chromecast Products:** GOOG-SONOSNDCA-00073263, GOOG-
 5 SONOSNDCA-00073163, GOOG-SONOSNDCA-00073294, GOOG-SONOSNDCA-00073259.

6 **Additional Accused Nest Products:** GOOG-SONOSNDCA-00073183, GOOG-
 7 SONOSNDCA-00073113, GOOG-SONOSNDCA-00073113, GOOG-SONOSNDCA-00073240,
 8 GOOG-SONOSNDCA-00073277.

9 **Additional Accused Pixel Products:** GOOG-SONOSNDCA-00070921, GOOG-
 10 SONOSNDCA-00070967, GOOG-SONOSNDCA-00071002, GOOG-SONOSNDCA-00071065,
 11 GOOG-SONOSNDCA-00071079, GOOG-SONOSNDCA-00071111, GOOG-SONOSNDCA-
 12 00071208, GOOG-SONOSNDCA-00071274.

13 **INTERROGATORY NO. 19:**

14 Describe in detail the complete legal and factual basis for each defense plead in Google's
 15 Answer and Counterclaims (Dkt. 32), including but not limited to: an identification of all facts
 16 supporting or refuting Google's defenses, all persons knowledgeable of these facts (including every
 17 person whose knowledge or opinion is or was relied upon as a basis for Google's defenses, the
 18 opinion or substance of such person's or persons' knowledge, and the entire basis of that knowledge
 19 or opinion), and all documents and things, including the Bates number(s) of such documents and
 20 things, concerning, including the Bates number(s) of such documents and things, concerning
 21 Google's defenses.

22 **OBJECTIONS:** Google incorporates by reference all of its General Objections as if fully
 23 set forth herein. Google objects to this interrogatory on the grounds that it is vague, ambiguous,
 24 unclear as to information sought, and lacking sufficient particularity to permit Google to reasonably
 25 prepare a response with respect to the undefined terms "opinion" "is or was relied upon as a basis,"
 26 "opinion or substance," and "entire basis." Google further objects to this interrogatory on the
 27 grounds that it assumes the existence of hypothetical facts that are incorrect or unknown to Google.
 28 Google also objects to this interrogatory as overbroad, burdensome, and not proportional to the

1 needs of the case, including to the extent it (i) seeks identification of “all persons knowledgeable”
2 of certain facts,’ and (ii) seeks “all documents and things” concerning Google’s defenses. Google
3 further objects to this interrogatory to the extent it seeks information that is not reasonably accessible
4 or that is not within Google’s possession, custody, or control, such as information that is within
5 Sonos’s or a third party’s possession, custody or control and has not yet been produced in this case.
6 Google further objects to this interrogatory as overbroad and unduly burdensome to the extent that
7 it seeks information that is publicly available, not uniquely within the control of Google, or is
8 equally available to Sonos. Google additionally objects to this interrogatory to the extent it seeks
9 communications and information protected from disclosure by the attorney-client privilege and/or
10 attorney work product doctrine. Google further objects to this interrogatory to the extent it seeks
11 confidential and/or proprietary business information. Google also objects to this interrogatory to the
12 extent that it premature seeks expert discovery, opinion, and/or testimony. Google also objects to
13 this interrogatory on the grounds that it seeks information that is obtainable through less burdensome
14 and more convenient forms of discovery.

15 Google further objects to this interrogatory to the extent that it purports to seek ESI before
16 Sonos has shown good cause for such ESI and before the parties have agreed on a procedure for
17 doing so in accordance with the Court’s OGP.

18 **RESPONSE:** Subject to and without waiving the foregoing General and Specific
19 objections, Google responds, as follows:

20 Google incorporates by reference Google’s Answer and Counterclaims (Dkt. 32), Google’s
21 briefing in connection with its Motion to Transfer (Dkt. 34), and Google’s Fed. R. Civ. P. 26 initial
22 disclosures.

23 Pursuant to Rule 33(d) of the Federal Rules of Civil Procedure, Google further refers Sonos
24 to the source code that Google has made available and the following documents containing
25 information responsive to this interrogatory: GOOG-SONOS-WDTX-INV-00000001-16306,
26 GOOG-SONOSWDTX-00000001-00053957.

27 **SUPPLEMENTAL OBJECTIONS & RESPONSE:** Google further objects to this
28 interrogatory because Sonos bears the burden of proving infringement, and this interrogatory

1 attempts to shift the burden of proof to Google for non-infringement. Google maintains the General
2 and Specific objections set forth above. Subject to and without waiving the foregoing General and
3 Specific objections, Google responds, as follows:

4 ***Non-Infringement***

5 Google does not infringe and has not infringed, either literally or under the doctrine of
6 equivalents, and is not liable for infringement of, any valid and enforceable claim of the '615, '033,
7 '966, and '885 patents ("Asserted Patents"), including under the doctrine of equivalents or reverse
8 doctrine of equivalents. Google understands that the Court has ruled on certain issues for claim 13
9 of the '615 patent and claim 1 of the '885 patent. Google reserves its rights to appeal any adverse
10 judgment, but through this disclosure does not intend to offer any opinions contrary to any Court
11 order. Google incorporates by reference its response to Interrogatory No. 12 and the supplements
12 thereto, as well as the expert reports of Dr. Samrat Bhattacharjee and Dr. Dan Schonfeld, Google's
13 Motion for Summary Judgment Pursuant to the Court's Patent Showdown, Google's Opposition to
14 Sonos's Motion for Summary Judgment Pursuant to the Court's Patent Showdown Procedure,
15 Google's Answer and Counterclaims to Sonos, Inc.'s Third Amended Complaint (Dkt. 223), and
16 testimony from its witnesses regarding the accused products and services.

17 In addition, with respect to the '615 Patent, the Court has already ruled in its order on
18 Google's summary judgment motion that accused apps do not infringe the '615 patent because they
19 do not employ a "local playback queue" as required by claim 13, given that the groups of items
20 stored by the YouTube apps and Google Play Music app do not qualify as a "playback queue." Dkt.
21 316 at 9-11. Because asserted claims 14, 15, 18, 19, 20, and 21 further limit claim 13, the Court's
22 non-infringement determination applies equally to those dependent claims. Sonos's contentions
23 argue that Claim 25, the only other independent claim asserted by Sonos, has substantially similar
24 limitations to those of claim 13; thus, Sonos's infringement allegations for claim 25 and its asserted
25 dependent claim 26 also must fail under its contentions.

26 Pursuant to Rule 33(d) of the Federal Rules of Civil Procedure, Google further refers Sonos
27 to the following non-exhaustive list of additional documents containing information responsive to
28 this interrogatory: GOOG-SONOSNDCA-00072571, GOOG-SONOSNDCA-00073341-73409,

1 GOOG-SONOSNDCA-00116432-116633, GOOG-SONOSNDCA-000117096-117795,
 2 documents cited in the expert reports and materials considered of Dr. Samrat Bhattacharjee and Dr.
 3 Dan Schonfeld.

4 *Invalidity*

5 The claims of the Asserted Patents are invalid and unenforceable for failure to comply with
 6 the conditions for patentability under the patent laws of the United States, 35 U.S.C. §§ 1 et seq.,
 7 including 35 U.S.C. §§ 101, 102, 103, and/or 112. Google incorporates by reference Google's
 8 Invalidity Contentions and any supplements or amendments thereto, the expert reports of Dr. Samrat
 9 Bhattacharjee and Dr. Dan Schonfeld, Google's Opposition to Sonos's Motion for Summary
 10 Judgment Pursuant to the Court's Patent Showdown Procedure, Google's invalidity contentions,
 11 and the prior art cited and referenced therein.

12 In addition, with respect to the '615 Patent, the Court has already ruled in its order on
 13 Google's summary judgment motion that claim 13 of the 615 Patent is invalid pursuant to 35 U.S.C.
 14 §§ 103, given that it would have been obvious to combine Google's prior YouTube Remote app
 15 system with disclosures in United States Patent No. 9,490,998. Dkt. 316 at 11-17. Because asserted
 16 claims 14, 15, 18, 19, 20, and 21 further limit claim 13, the Court's invalidity determination applies
 17 equally to the same limitations in those dependent claims. Sonos's contentions argue that Claim
 18 25, the only other independent claim asserted by Sonos, has substantially similar limitations to those
 19 of claim 13; thus, the Court's ruling regarding elements of the claim found in the prior art also apply
 20 to Claim 25 and its asserted dependent claim 26.

21 Pursuant to Rule 33(d) of the Federal Rules of Civil Procedure, Google further refers Sonos
 22 to the following non-exhaustive list of additional documents containing information responsive to
 23 this interrogatory: GOOG-SONOSNDCA-00056778-56801, GOOG-SONOSNDCA-00056802-
 24 56918, GOOG-SONOSNDCA-00056802-56943, GOOG-SONOSNDCA-00056944-56954,
 25 GOOG-SONOSNDCA-00069852-70056, GOOG-SONOSNDCA-00070057-00070103, GOOG-
 26 SONOSNDCA-00070852-70920. GOOG-SONOSNDCA-00071317-71320, GOOG-
 27 SONOSNDCA-00072571, GOOG-SONOSNDCA-00073341-73409, GOOG-SONOSNDCA-
 28 00075527-75564, GOOG-SONOSNDCA-00000075574-00075633, GOOG-SONOSNDCA-

1 00116432-116633, GOOG-SONOSNDCA-000116634-116707, GOOG-SONOSNDCA-
 2 000116708-117088, GOOG-SONOSNDCA-000117096-117795.

3 ***Prosecution History Estoppel***

4 By reason of statements, representations, concessions, admissions, arguments, and/or
 5 amendments, whether explicit or implicit, made by or on behalf of the applicant during the
 6 prosecution of the patent applications that led to the issuance of the Asserted Patents, Sonos's claims
 7 of patent infringement are barred, in whole or in part, by the doctrine of prosecution history estoppel.

8 Pursuant to Rule 33(d) of the Federal Rules of Civil Procedure, Google further refers Sonos
 9 to the following non-exhaustive list of additional documents containing information responsive to
 10 this interrogatory: the prosecution history statements cited in the expert reports of Dr. Samrat
 11 Bhattacharjee and Dr. Dan Schonfeld; and the prosecution history of each asserted patent including
 12 counterparts and foreign counterparts, specifically including the Australian prosecution history for
 13 Australian Patent Application No. 2020239784.

14 ***Unclean Hands, Equitable Estoppel, Waiver, and Implied License***

15 Sonos's infringement claims for the '615 and '033 Patents are barred by the doctrines of
 16 unclean hands, equitable estoppel and waiver.

17 Sonos itself has characterized the '615 and '033 Patents as its "cloud queue patents" that
 18 "deal with exactly how music streaming on a cloud gets transferred between a device, let's say a cell
 19 phone, and a speaker and how do you take a queue that's queued up in the cloud and transfer that queue
 20 of music from one device to another." See Nov. 11, 2020 Hr'g Tr. 17:3-8. Sonos asserts that both
 21 patents claim priority through a series of continuation applications to U.S. Application No.
 22 13/341,237, filed on December 30, 2011, and name Mr. Tad Coburn as an inventor. However,
 23 Sonos did not introduce the alleged notion of a cloud-based queue into these patents until eight years
 24 later in 2019—*after* it already finished a collaboration with Google wherein **Google** developed cloud
 25 queue technology in connection with integrating its Google Play Music service onto Sonos speakers.
 26 See, e.g., '033 prosecution history (November 1, 2019 amendment adding notion of "remote
 27 playback queue").


1 Google and Sonos began a collaboration in 2013 and entered into several related agreements,
 2 including a November 2013 Content Integration Agreement (“CIA”). The CIA provided both that
 3 “any and all development work done by or on behalf of” Google as part of the collaboration—and
 4 “any and all intellectual property rights arising from or related thereto”—would be the “sole and
 5 exclusive property” of Google, and that Sonos would not “claim for itself or for any third party” any
 6 right, title or interest in such work:

7 3.4. Ownership of Service Provider Intellectual Property Rights. The Music
 8 Service, the Provider Developments (as defined below), and any and all intellectual
 9 property rights arising from or related thereto are and shall remain the sole and
 10 exclusive property of Service Provider. Sonos will not claim for itself or for any
 11 third party any right, title, interest or licenses to the Music Service or Provider
 12 Developments, except for the limited license granted herein. The Provider
 13 Developments consist of any and all development work done by or on behalf of
 14 Service Provider in creating the Integrated Service Offering, and any code or other
 15 materials owned or controlled by Service Provider and included by Service
 16 Provider in the Integrated Service Offering,

17 See GOOG-SONOSNDCA-00055243 at Recitals & § 3.4. From approximately 2013 to
 18 2018 Google and Sonos also collaborated with respect to integrating YouTube and YouTube Music
 19 with Sonos devices.

20 Despite signing this agreement, Sonos filed a complaint alleging infringement of the ’615
 21 and ’033 Patent, directing accusations at Google technologies that arise out of or relate to the very
 22 development work Google did as part of these collaborations. For example, at the same time that
 23 the CIA was signed in November 2013, Google told Sonos that it was considering “a more cloud
 24 queue centric model” for certain aspects of development related to the collaborations. GOOG-
 25 SONOSWDTX-00053825. “Tad” Coburn, then a Principal Software Engineer at Sonos and the
 26 named inventor of the ’615 and ’033 Patents, acknowledged Google’s idea as “very interesting,”
 27 while noting that it “will definitely complicate things.” *Id.* Google made clear that it wanted to
 28 focus “time and energy into cloud queue” to address issues and deliver key features, including one
 that Sonos believed was critically important and referred to as “passing the beer test”—or the ability
 for music to keep playing if the device leaves the location of the speaker. See GOOG-
 SONOSWDTX-00053828; GOOG-SONOSWDTX-00053819.

Google went on to develop its technology at the encouragement of Sonos. *See* SONOS-SVG2-00072620 (Sonos discussing “[e]ncouraging [Google] to further pursue . . . Cloud Queues” or “make the entire control protocol to ‘go through the cloud’”). For example, Sonos regularly asked Google about its progress on cloud queue and expressed interest in contributing to the process. *See* GOOG-SONOSWDTX-00072699 (Tad Coburn emailing Google, stating that “I wanted to check in with you re: queues in the cloud. . . . Have you started on the technical design? We would love to work with you on the design before it is final-final[.]”). Internally, Tad Coburn notified other Sonos employees that he had “managed to engage Debajit,” Google’s engineering lead for the collaboration, in a “technical” conversation about the design of ‘queues in the cloud.’” SONOS-SVG2-00072649. The details of Google’s development work were known to Sonos at the time in connection with the parties’ collaborations. In fact, Sonos kept “check[ing] on the status of the CloudQueue API” (GOOG-SONOSWDTX-00053921) and pressured Google to share its draft in order to “speed up integration testing for cloud queue work” (SONOS-SVG2-00072499). Google shared the cloud queue documents it had written, including the cloud queue API and a command and event specification, with Sonos in or around July 2014. *See, e.g.,* GOOG-SONOSWDTX-00053930.

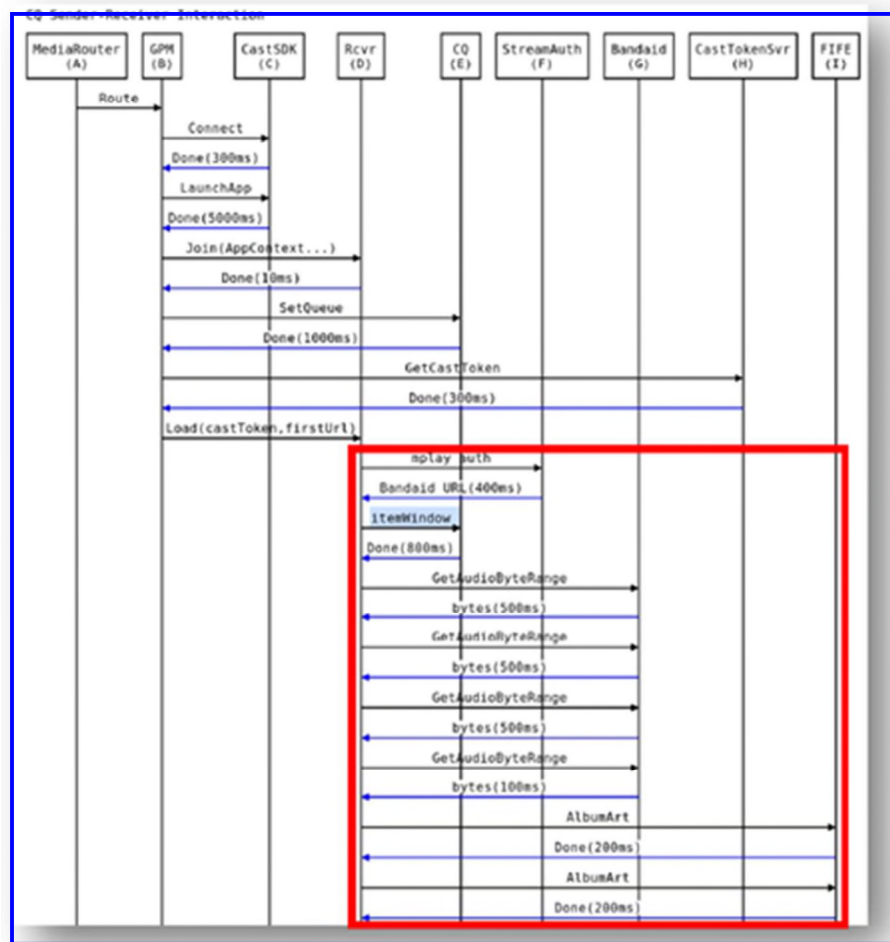
By the time of the parties’ collaboration, the Google Play Music app already included the accused Cast features, including a Cast  icon that could be selected to display Cast-enabled receivers. The Cast functionality is illustrated and/or described in at least the following videos:

- 1) <https://www.youtube.com/watch?v=J2V0ITFzon4> (Chromecast: How to cast using Google Play Music, uploaded November 27, 2013).
- 1) <https://web.archive.org/web/20140429051044/https://support.google.com/chromecast/answer/2998481?hl=en>

Sonos—including the Sonos employees that worked on the Cloud Queue collaboration—were well aware of GPM’s use of Cast, including based on their own use of the Google Play Music application for the collaboration. *See, e.g.,* SONOS-SVG2-00098770 (2014-8-14 Email from Sonos’s Steven Beckhardt to Sonos’s Keith Corbin stating: “Keith, I give permission for Google to access my Google Play Music account.”); *see also* SONOS-SVG2-00233735 (2014-01-31 Sonos meeting

1 providing whiteboard illustration of “Queues in the Cloud,” showing “GPM” application casting to
 2 playback devices.); SONOS-SVG2-00181927 (2014-5-9 email from Sonos to Google asking about
 3 the status of “queues in the cloud.”).

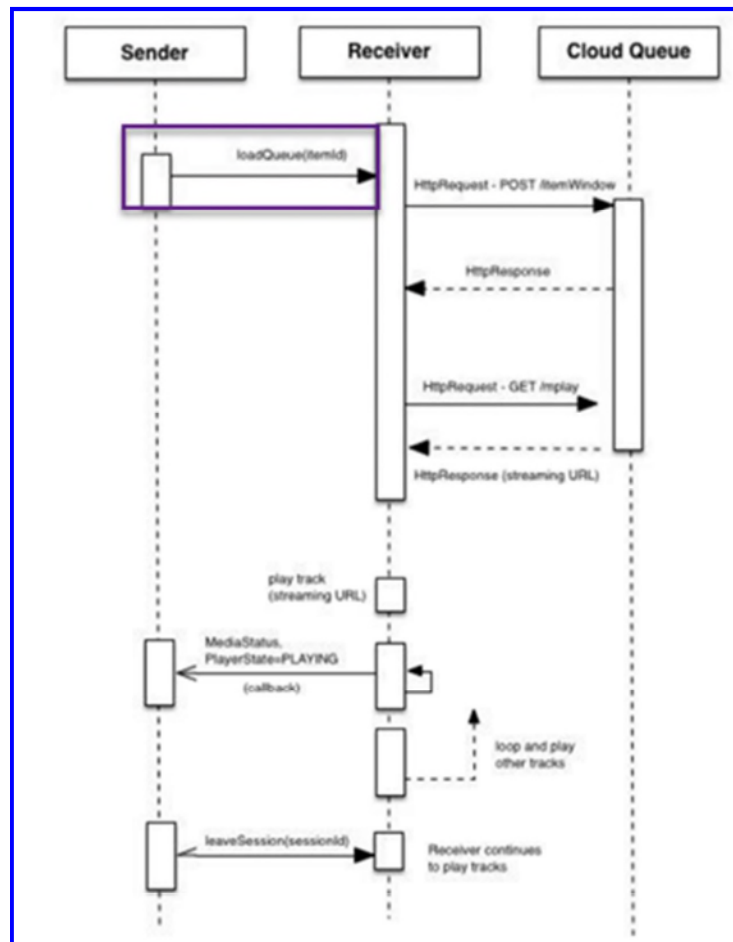
4 Additionally, the cloud queue technology that Google was developing in 2013 and 2014, is
 5 in relevant respects, analogous to technology that Sonos has accused of infringing its patents. For
 6 example, for the '615 patent Sonos's infringement contentions pointed to the below document as
 7 allegedly showing the accused Cloud Queue API functionality:



2-24-2022 Infringement Contentions, Ex. A ('615 Chart) at 94 (citing GOOG-SONOSWDTX-00043627).

This Cloud Queue API functionality that Sonos accused is the same functionality described in the Cloud Queue API documents from the parties' collaboration.

For instance, just as shown in the image above of the accused Cloud Queue API a sender device stores the playback queue in the Cloud Queue and then issues a “load” command to start playback of the Cloud Queue on the receiver device. *See, e.g.*, “Music Cloud Queue JSON-based protocol for Commands and Events” (GOOG-SONOSWDTX-00040342) at GOOG-SONOSWDTX-00040360-62 (describing “loadCloudQueue” command). The load command is also shown in the Music Cloud Queue Sequence Diagrams that I have shown below (annotated in purple):

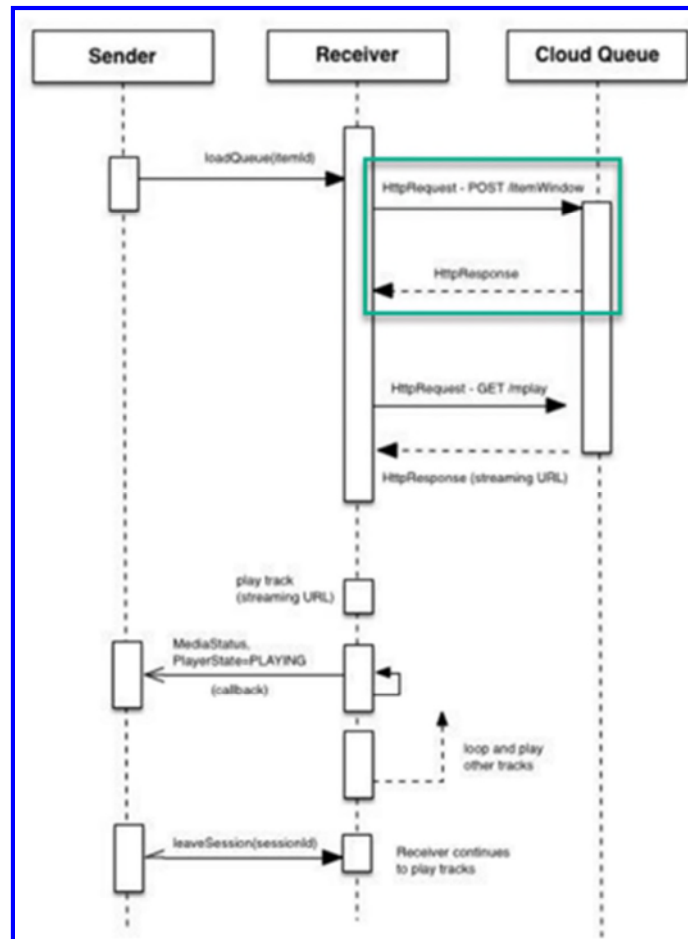


“Music Cloud Queue Sequence Diagrams” (GOOG-SONOSWDTX-00051100) at 1102.

Further, Sonos accused the ability of the Cloud Queue API in the accused GPM application to add ItemIDs and track URL (the alleged “resource locators”) to a receiver device as part of an itemWindow response (the alleged “local playback queue”). *Id.* at 70-71. In particular, with the accused Cloud Queue API after receiving a load command the receiver device transmits an

itemWindow request to the Cloud Queue server specifying a “previousWindowSize” and “upcomingWindowSize.” See MSJ Decl., ¶¶ __. The previousWindowSize and upcomingWindowSize are the number of tracks before and after the current media item that should be returned, which in the accused Cloud Queue API is set to one (1). In other words, in the accused devices the Cloud Queue will return an itemID and track URL for the current media item, as well as the one item before and after it. *Id.*

This same functionality is described in the Cloud Queue API documents exchanged during the collaboration. After receiving a “load” command, the Cloud Queue API involved sending an itemWindow request that returns an itemWindow response, as shown in the Music Cloud Queue Sequence Diagrams that I have reproduced below (annotated in green):



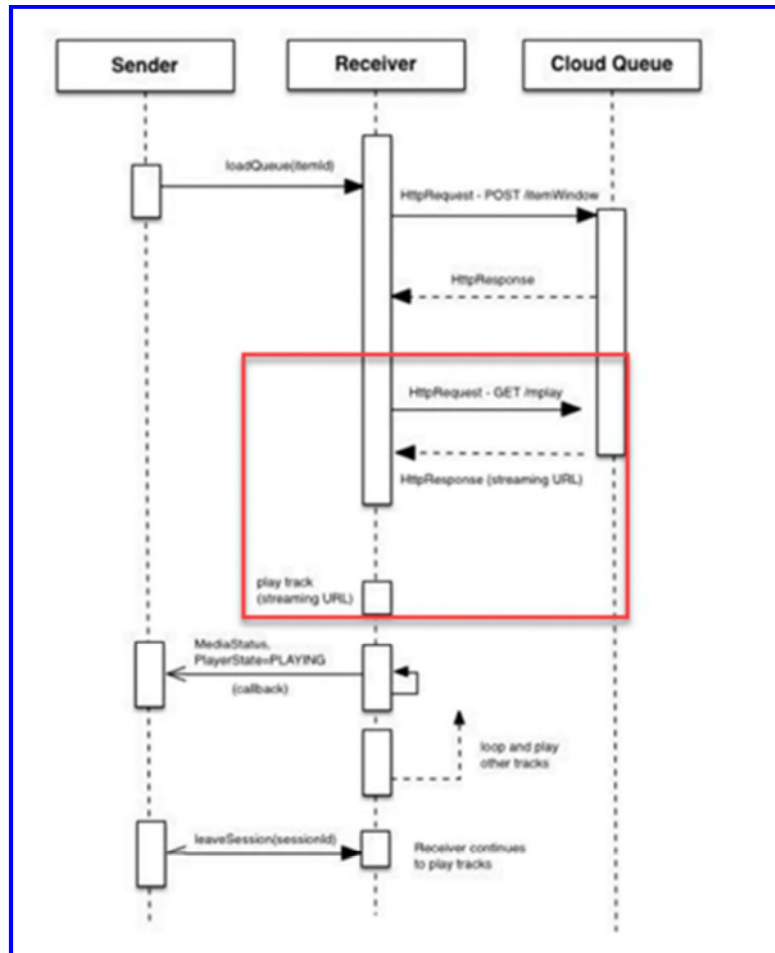
“Music Cloud Queue Sequence Diagrams” (GOOG-SONOSWDTX-00051100) at 1102.

Like the accused Cloud Queue API, the itemWindow request in the collaboration documents specified a “previousWindowSize” and “upcomingWindowSize.” This can be seen in, for example, the Cloud Queue REST API which provides an example itemWindow response that has a “previousWindowSize” and “upcomingWindowSize” set to five (5) and twenty (20), meaning that the Cloud Queue server would return information for the current media item and the five media items before it and the twenty media items that after it. The “previousWindowSize” and “upcomingWindowSize” could also be set at one (1), as in the accused Cloud Queue API.



Music Cloud Queue REST API” (GOOG-SONOSWDTX-00036998); *see also* “Debugging the Cloud Queue in five easy steps” (GOOG-SONOSWDTX-00037355) at 356-357.

Further, Sonos accused the ability of the Cloud Queue API in the accused GPM application to retrieve streaming URLs that it uses to obtain multimedia content from Google’s content delivery network (called Bandid). *Id.* at 93. Again, this same functionality is described in the Cloud Queue API documents exchanged during the collaboration. For example, the Music Cloud Queue Sequence Diagrams that I have reproduced below shows the receiver obtaining a streaming URL and then using the streaming URL to retrieve the multimedia content from the content delivery network (annotated in red):



Music Cloud Queue Sequence Diagrams” (GOOG-SONOSWDTX-00051100) at 1102

Sonos is also accusing substantially the same cloud queue functionality in the accused YouTube applications. For instance, Sonos alleges that the accused YouTube application transmits a “setPlaylist” message to a Cast-enabled receiver device to start playback of the Cloud Queue on the receiver device, and that after receiving the setPlaylist message the accused Cast-enabled receiver devices transmit a “WatchNext” message to receive a videoId for a window of the previous, current and next media items in the Cloud Queue. In other words, Sonos alleges that the accused YouTube applications operate in materially the same way as the Cloud Queue API’s load command and getItemWindow functionality. Further, Sonos accused the accused YouTube application of retrieving streaming URLs that are used to obtain multimedia content from Google’s content delivery network (called Bandid). Again, this functionality is substantially the same as that in the Cloud Queue API.

1 Sonos also understood—and acknowledged at the time—that Google would be using its
 2 technology not just in connection with Sonos devices but also in connection with other devices.
 3 This included Google’s own products—in fact, Tad Coburn admitted that Sonos “knew that Google
 4 was planning to use cloud queue . . . to support the feature where you can Cast music from a phone
 5 to like a TV . . . as part of the Google Cast functionality.” T. Coburn Dep. Tr. at 92:25-93:8. Internal
 6 Sonos emails also reflect that Sonos had discussions about Google’s “need to implement Cloud
 7 Queue against ChromeCast as well[.]” SONOS-SVG2-00072620.

8 At no time during the parties’ collaborations did Sonos indicate to Google that Google’s
 9 development work was improper in any respect. As Tad Coburn testified, at the time of the
 10 collaboration, there was “no concern . . . that what we were doing with Google might infringe.”
 11 Coburn Dep. Tr. at 120:10-20. Additionally, Sonos witnesses all concede that Sonos never notified
 12 or indicated to Google that it was infringing any of Sonos’s intellectual property rights. *See, e.g.,*
 13 Coburn Dep. Tr. at 121:12-16 (“Q. Are you personally aware of anyone at Sonos saying anything
 14 to Google about Sonos patents or Sonos intellectual property during the period of the collaboration?
 15 A. Not that I can recall.”); K. Bender Dep. Tr. at 220:19-23 (“Q Are you aware of anyone from
 16 Sonos ever telling Google that any of the technology Google developed as part of the collaboration
 17 infringed any of Sonos’s patents? A. Not that I recall, no.”); J. Kendall Dep. Tr. at 122:9-15 (Q.
 18 Do you know if anyone from Sonos ever told Google that the technology Google was developing is
 19 part of the Google Play Music collaboration infringed Sonos' patents? A. I have no recollection
 20 of that. No, I don't know.”). To the contrary, Sonos—having already agreed that it would not “claim
 21 for itself or any third party” any “right, title, interest or licenses” to Google’s development work—
 22 encouraged Google to continue that work as the parties’ collaboration went on through 2015, when
 23 the Google Play Music and Sonos integration with cloud queue technology was launched.

24 Not only did Sonos breach the CIA by claiming the technology Google developed during
 25 the collaboration as its own, but Sonos actually capitalized on Google’s work by utilizing it to
 26 establish Sonos’s own cloud queue API in order to engage in implementations with other partners.
 27 As Tad Coburn testified, Google’s API and documentation was the “precursor” to and “expanded”
 28 upon to create Sonos’s “Muse API,” which allows third-party applications to directly control

1 Sonos's speakers. Tad Coburn Dep. Tr. at 113:17-114:13, 117:18-118:4; *see* SONOS-SVG2-
2 00182805. Sonos shared this API technology with third-parties such as Pandora in an effort to
3 expand the ability for direct playback—which, at that point, Sonos had only successfully achieved
4 with Google—to those other music services. In fact, Sonos purposefully removed references of
5 Google from the Cloud Queue API before sending it to other partners such as Spotify. *See* SONOS-
6 SVG2-00140005; SONOS-SVG2-00140006.

7 Sonos also represented to potential music service partners that it had been the one to develop
8 a cloud queue solution with respect to direct playback both in private discussions and during a
9 partner summit it hosted in October 2015 to “share Sonos’ vision for play all and being able to play
10 all music to Sonos speakers.” A. Elliot Dep. Tr. at 78:20-79:22; *see, e.g.*, SONOS-SVG2-00081532
11 (“Cloud Queue” listed as a topic in Partner Summer Presentation Review); SONOS-SVG2-
12 00091209 (telling SoundCloud that the Sonos was developing its “own set of APIs” called the
13 “Sonos Direct Control API” that will enable “playing to Sonos directly from a music service”).
14 Eventually, Sonos published its APIs that were based on the development work Google did during
15 the parties’ collaboration publicly on its “developer portal,” a website that allowed potential partners
16 to access information such as “the API documentation, sample application, [and] sample code
17 snippets that help them build their integration.” J. Schmerder Dep. Tr. at 21:18-22:10; A. Elliot
18 Dep. Tr. at 65:22-25.

19 Around the same time that the parties were collaborating on the Google Play Music
20 integration, Sonos also engaged in conversations and discussions with YouTube teams regarding
21 the implementation of YouTube and YouTube Music onto Sonos speakers. During these calls,
22 Google and Sonos discussed how the YouTube team would “sync with Google Play folks to
23 understand” whether the technology that was being worked on for direct playback in that
24 collaboration would be something they could “use and/or help develop.” *See, e.g.*, GOOG-
25 SONOSNDA-00116344. The YouTube team noted that its “API proposition is the exactly same as
26 what Google Play is implementing with Sonos,” and Sonos was to “provide tech documentation and
27 learnings” from that Google Play Music direct playback integration. *Id.* Given these detailed
28 discussions regarding technical implementation and strategy, Sonos was aware that YouTube

1 intended to leverage the same cloud queue technology that the Google Play Music team had
2 developed.

3 Sonos's claims against Google are barred by the doctrine of unclean hands because Sonos
4 engaged in negligent, willful, improper, other wrongful conduct in connection with the matters
5 alleged in the Third Amended Complaint.

6 '615 & '033 Patents. To the extent Sonos contends that Google infringes the '615 and '033
7 patents, and to the extent Sonos contends that it conceived of the alleged invention of the '615 and
8 '033 patents prior to the parties' collaborations, Sonos wrongfully encouraged Google to develop
9 the now-accused technology during the parties' collaborations, including in the context of an
10 agreement providing that Google owned any intellectual property embodied by its development
11 work and that Sonos would not claim any right in it. Sonos also wrongfully used information it
12 learned from Google's development work to introduce amendments to the claims of the '615 and
13 '033 patents after the parties' collaborations and despite Sonos's agreement that Google owned any
14 intellectual property embodied by Google's technology and that Sonos would not claim any right in
15 it. Further, Sonos also wrongfully utilized the documentation and technology developed by Google
16 from the collaboration on other partnerships and shared such information with third-parties. In any
17 of these circumstances, Sonos's conduct was willful, wrongful, and egregious, and the doctrine of
18 unclean hands applies.

19 '885 & '966 Patents. To the extent Sonos contends that Google infringes the '885 and '966
20 patents, and to the extent Sonos contends that it conceived of the alleged invention of the '885 and
21 '966 patents prior to the parties' collaborations on this functionality, Sonos wrongfully encouraged
22 Google to develop the now-accused technology. In the alternative, to the extent Sonos contends
23 that Google infringes the '885 and '966 patents, on information and belief, Sonos wrongfully used
24 information it learned from Google's development work to introduce amendments to the claims of
25 the '885 and '966 patents after the parties' discussions. In either circumstance, Sonos's conduct
26 was willful, wrongful, and egregious, and the doctrine of unclean hands applies.

27 Sonos's infringement claims are also barred by the doctrine of the equitable estoppel.
28 Google relied on Sonos's conduct by, for example, proceeding with the development and

1 commercialization of its technology. Google would be materially harmed if Sonos were permitted
2 to assert that Google infringes the asserted patents, given that Sonos's assertion would be
3 inconsistent with Sonos's earlier conduct. Google has invested in the development and
4 commercialization of now-accused technology and, had Sonos notified Google of its alleged rights
5 and brought its claims without delay, Google could have taken action to avoid any purported claim
6 of infringement and thereby moot those claims.

7 '615 & '033 Patents. To the extent Sonos contends that Google infringes the '615 and '033
8 patents, and to the extent Sonos purportedly conceived of the alleged invention of the '615 and '033
9 patents prior to the parties' collaborations, Sonos wrongfully encouraged Google to develop the
10 now-accused technology during the parties' collaborations, including in the context of an agreement
11 providing that Google owned any intellectual property embodied by its development work and
12 Sonos would not "claim for itself or for any third party" any right in such work. Not once during
13 the parties' years-long collaborations did Sonos notify or suggest to Google that Google's
14 development work infringed on Sonos's intellectual property rights or was otherwise improper, nor
15 did Sonos indicate that it was improper for Google to use the technology it developed in its own
16 products or in collaborations with other partners was prohibited despite knowing that Google was
17 be doing so. Sonos's conduct led Google to reasonably infer that Google owned any intellectual
18 property stemming from the development of now-accused technology and/or that Sonos did not
19 intend to enforce its purported intellectual property rights with respect to that technology.

20 '885 & '966 Patents. To the extent Sonos contends that Google infringes the '885 and '966
21 patents, and to the extent Sonos purportedly conceived of the alleged invention of the '885 and '966
22 patents prior to the parties' collaborations, Sonos wrongfully encouraged Google to develop the
23 now-accused technology during the parties' collaborations. Not once during the parties' years-long
24 collaborations did Sonos notify or suggest to Google that Google's development work infringed on
25 Sonos's intellectual property rights or was otherwise improper, nor did Sonos indicate that it was
26 improper for Google to use the technology it developed in its own products or in collaborations with
27 other partners was prohibited despite knowing that Google was be doing so. Sonos's conduct led
28 Google to reasonably infer that Google owned any intellectual property stemming from the

1 development of now-accused technology and/or that Sonos did not intend to enforce its purported
2 intellectual property rights with respect to that technology.

3 Sonos's infringement claims are further barred by the doctrine of waiver.

4 '615 & '033 Patents. To the extent Sonos contends that Google infringes the '615 and '033
5 patents, and to the extent Sonos purportedly conceived of the alleged invention of the '615 and '033
6 patents prior to the parties' collaborations, Sonos wrongfully encouraged Google to develop the
7 now-accused technology during the parties' collaborations, including in the context of an agreement
8 providing that Google owned any intellectual property embodied by its development work and
9 Sonos would not "claim for itself or for any third party" any right in such work. Not once during
10 the parties' years-long collaborations did Sonos notify or suggest to Google that Google's
11 development work infringed on Sonos's intellectual property rights or was otherwise improper, nor
12 did Sonos indicate that it was improper for Google to use the technology it developed in its own
13 products or in collaborations with other partners was prohibited despite knowing that Google was
14 be doing so. Sonos thereby, and with full knowledge of the material facts, intentionally relinquished
15 its right to bring an action based on the '615 and '033 patents, or intentionally acted inconsistently
16 with claiming such rights.

17 '885 & '966 Patents. To the extent Sonos contends that Google infringes the '885 and '966
18 patents, and to the extent Sonos purportedly conceived of the alleged invention of the '885 and '966
19 patents prior to the parties' collaborations, Sonos wrongfully encouraged Google to develop the
20 now-accused technology during the parties' collaborations. Not once during the parties' years-long
21 collaborations did Sonos notify or suggest to Google that Google's development work infringed on
22 Sonos's intellectual property rights or was otherwise improper, nor did Sonos indicate that it was
23 improper for Google to use the technology it developed in its own products or in collaborations with
24 other partners was prohibited despite knowing that Google was be doing so. Sonos thereby, and
25 with full knowledge of the material facts, intentionally relinquished its right to bring an action based
26 on the '885 and '966 patents, or intentionally acted inconsistently with claiming such rights.

27 Sonos's infringement claims are additionally barred by the doctrine of implied waiver.
28

1 '615 & '033 Patents. To the extent Sonos contends that Google infringes the '615 and '033
2 patents, and to the extent Sonos purportedly conceived of the alleged invention of the '615 and '033
3 patents prior to the parties' collaborations, Sonos wrongfully encouraged Google to develop the
4 now-accused technology during the parties' collaborations, including in the context of an agreement
5 providing that Google owned any intellectual property embodied by the its development work and
6 Sonos would not "claim for itself or for any third party" any right in such work. Not once during
7 the parties' years-long collaborations did Sonos notify or suggest to Google that Google's
8 development work infringed on Sonos's intellectual property rights or was otherwise improper, nor
9 did Sonos indicate that it was improper for Google to use the technology it developed in its own
10 products or in collaborations with other partners was prohibited despite knowing that Google was
11 be doing so. Sonos thereby, and with full knowledge of the material facts, intentionally relinquished
12 its right to bring an action based on the '615 and '033 patents, or intentionally acted inconsistently
13 with claiming such rights. As a result of Sonos's conduct, Google reasonably inferred that Sonos
14 consented to any alleged use by Google of the now-accused technology.

15 '885 & '966 Patents. To the extent Sonos contends that Google infringes the '885 and '966
16 patents, and to the extent Sonos purportedly conceived of the alleged invention of the '885 and '966
17 patents prior to the parties' collaborations, Sonos wrongfully encouraged Google to develop the
18 now-accused technology during the parties' collaborations. Not once during the parties' years-long
19 collaborations did Sonos notify or suggest to Google that Google's development work infringed on
20 Sonos's intellectual property rights or was otherwise improper, nor did Sonos indicate that it was
21 improper for Google to use the technology it developed in its own products or in collaborations with
22 other partners was prohibited despite knowing that Google was be doing so. Sonos thereby, and
23 with full knowledge of the material facts, intentionally relinquished its right to bring an action based
24 on the '885 and '966 patents, or intentionally acted inconsistently with claiming such rights. As a
25 result of Sonos's conduct, Google reasonably inferred that Sonos consented to any alleged use by
26 Google of the now-accused technology.

27 Google further incorporates by reference Google's Answer and Counterclaims to Sonos,
28 Inc.'s Third Amended Complaint (Dkt. 223) and the expert report of Thomas Varner. Pursuant to

1 Rule 33(d) of the Federal Rules of Civil Procedure, in addition to the documents cited above, Google
2 further refers Sonos to the following non-exhaustive list of additional documents containing
3 information responsive to this interrogatory: GOOG-SONOSWDTX-00053819-53956, GOOG-
4 SONOSNDCA-00070533-71314, GOOG-SONOSNDCA-00073410-00075526, GOOG-SONOS-
5 NDCA-00075636-92754, GOOG-SONOS-NDCA-00113698-115224, GOOG-SONOSNDCA-
6 00116343-00116429, GOOG-SONOSWDTX-00051100; GOOG-SONOSWDTX-00036998;
7 GOOG-SONOSWDTX-00040342; GOOG-SONOSWDTX-00037355; GOOG-SONOSWDTX-
8 00036998-37003, GOOG-SONOSWDTX-00053833-53836, GOOG-SONOSWDTX-00053866-
9 53870, GOOG-SONOSNDCA-00055243-55252, GOOG-SONOS-NDCA-00075709-75711,
10 GOOG-SONOS-NDCA-00092627, GOOG-SONOS-NDCA-00092766-92769, GOOG-SONOS-
11 NDCA-00110855-110857, GOOG-SONOS-NDCA-00112655-112656, GOOG-SONOSNDCA-
12 00117800, SONOS-SVG2-00027011, SONOS-SVG2-00040234-40235, SONOS-SVG2-
13 00059330-59331, SONOS-SVG2-00067651-67652, SONOS-SVG2-00067724-67730, SONOS-
14 SVG2-00067866-67867, SONOS-SVG2-00068003, SONOS-SVG2-00068295-68297, SONOS-
15 SVG2-00068912-68913, SONOS-SVG2-00068896-68900, SONOS-SVG2-00068935-68938,
16 SONOS-SVG2-00070566-70567, SONOS-SVG2-00070620, SONOS-SVG2-00070766-70768,
17 SONOS-SVG2-00071590-71591, SONOS-SVG2-00071942-71948, SONOS-SVG2-00072177,
18 SONOS-SVG2-00072471, SONOS-SVG2-00072649-72650, SONOS-SVG2-00072699, SONOS-
19 SVG2-00073496-73497, SONOS-SVG2-00073943-73949, SONOS-SVG2-00075157-75159,
20 SONOS-SVG2-00075441-75444, SONOS-SVG2-00078409-78412, SONOS-SVG2-00078510-
21 78511, SONOS-SVG2-00078871, SONOS-SVG2-00079425-79426, SONOS-SVG2-00079492,
22 SONOS-SVG2-00079605-79619, SONOS-SVG2-00079035-79036, SONOS-SVG2-00079183,
23 SONOS-SVG2-00079725-79726, SONOS-SVG2-00080113-80115, SONOS-SVG2-00080143-
24 80148, SONOS-SVG2-00080156, SONOS-SVG2-00080191-80192, SONOS-SVG2-00080264,
25 SONOS-SVG2-00080320, SONOS-SVG2-00080376-80386, SONOS-SVG2-00080452-80453,
26 SONOS-SVG2-00080493, SONOS-SVG2-00080510-80519, SONOS-SVG2-00080666, SONOS-
27 SVG2-00081097-81100, SONOS-SVG2-00081105-81108, SONOS-SVG2-00081179-81180,
28 SONOS-SVG2-00081509, SONOS-SVG2-00081307-81309, SONOS-SVG2-00081529-81536,

1 SONOS-SVG2-00081636-81637, SONOS-SVG2-00082145-82152, SONOS-SVG2-00083491,
 2 SONOS-SVG2-00083508-83509, SONOS-SVG2-00083592-83593, SONOS-SVG2-00083800,
 3 SONOS-SVG2-00083870-83872, SONOS-SVG2-00083877-83879, SONOS-SVG2-00083924-
 4 83928, SONOS-SVG2-00084036-84038, SONOS-SVG2-00084143-00084149, SONOS-SVG2-
 5 00084194-84195, SONOS-SVG2-00084394-84396, SONOS-SVG2-00085723-85732, SONOS-
 6 SVG2-00086826-86843, SONOS-SVG2-00086987, SONOS-SVG2-00091209-91210, SONOS-
 7 SVG2-00098288-98295, SONOS-SVG2-00095792-95797, SONOS-SVG2-00097413-97414,
 8 SVG2-00098566-98568, SONOS-SVG2-00099470-99472, SONOS-SVG2-00101794-101797,
 9 SONOS-SVG2-00112159, SONOS-SVG2-0014005-140015, SONOS-SVG2-00156957-156958,
 10 SONOS-SVG2-00158178-158181, SONOS-SVG2-00163410-163411, SONOS-SVG2-00178447,
 11 SONOS-SVG2-00181873-181876, SONOS-SVG2-00184930-184932, SONOS-SVG2-00185059-
 12 185089, SONOS-SVG2-00185464-185468, SONOS-SVG2-00185494-185496, SONOS-SVG2-
 13 00185747-185749, SONOS-SVG2-00185966-185968, SONOS-SVG2-00186211, SONOS-SVG2-
 14 00187279-187281, SONOS-SVG2-00188768-188770, SONOS-SVG2-00189095-189098,
 15 SONOS-SVG2-00189383, SONOS-SVG2-00189392, SONOS-SVG2-00189474-189475, SONOS-
 16 SVG2-00190442-190443, SONOS-SVG2-00191790-191792, SONOS-SVG2-00193866, SONOS-
 17 SVG2-00194279-194281, SONOS-SVG2-00201056-201058, SONOS-SVG2-00206304-206305,
 18 SONOS-SVG2-00211742-211747, SONOS-SVG2-00215742-215750; SONOS-SVG2-00215912-
 19 215915, SONOS-SVG2-00220121, SONOS-SVG2-00220144.

Patent Exhaustion

21 Sonos's infringement claims are barred by the doctrine of patent exhaustion. Under the
 22 doctrine of patent exhaustion, Sonos's claims are barred to the extent any of the allegedly infringing
 23 conduct is premised on or related to products made, sold, used, imported, or provided by any
 24 licensed entity (whether express or implied) to the Asserted Patents or related patents.

Limitation on Liability

26 Sonos's infringement claims, and the damages sought by Sonos therefor, are limited and/or
 27 barred by the parties' 2013 Content Integration Agreement. The 2013 Content Integration
 28 Agreement contains the following provision regarding limitation of liability:

8.1 In no event will either party be liable for any consequential, exemplary, special, indirect, incidental or punitive damages or lost profits (even if it has been advised of the possibility of such damages) arising from or relating to this agreement or the subject matter hereof, however caused, and under any theory of liability, except in case of gross negligence or wilful [*sic*] misconduct, breach of confidentiality or willful misappropriation of the intellectual property of the other party, and expect for the parties' obligations under Section 9 hereof, under no circumstances shall either party's total liability of any kind arising out of or related to this agreement including, but not limited to, any warranty claims hereunder, regardless of the forum and regardless of whether any action or claim is based on contract, tort, (including negligence), strict product liability, infringement or any other legal theory exceed ten thousand dollars (\$10,000); provided, however, that in no event shall the limitation set forth herein limit a party's right to obtain equitable relief against the other party. Each party acknowledges that the limitation of liability set out in this Section 7.1 [*sic*] reflects an informed, voluntary allocation between the parties of the risks (known and unknown) that may exist in connection with this agreement.

GOOG-SONOSNDCA-00055243 at § 8.1. Sonos's allegations with respect to the '615 and '033 patents are "arising from or relating to this agreement or the subject matter" thereof, including because, pursuant to that agreement, Google owns any intellectual property embodied by now-accused technology and Sonos cannot claim any right in it. Especially in light of the fact that Sonos wrongfully encouraged Google to develop the now-accused technology during the parties' collaborations, yet during the parties' years-long collaborations never notified Google that Google's development work infringed on Sonos's intellectual property rights or was otherwise improper, or indicated that it was improper for Google to use the technology it developed in its own products or in collaborations with other partners was prohibited despite knowing that Google was be doing so, there was no gross negligence, willful misconduct, breach of confidentiality, or willful misappropriation on behalf of Google. Any recovery for the purported infringement of the '615 and '033 patents is thus limited to \$10,000, given that Sonos's allegations relate to the subject matter of the 2013 Content Integration Agreement.

Google further incorporates by reference Google's Answer and Counterclaims to Sonos, Inc.'s Third Amended Complaint (Dkt. 223), Google's *Artic Cat* Notice and any supplements and/or amendments thereto, the expert reports of Christopher Bakewell.

Limitation on Damages

Sonos's claims for relief are limited or barred, in whole or in part, by 35 U.S.C. §§ 286, 287 and/or 288. Because Sonos and its licensees of the Asserted Patents failed to properly mark relevant

1 products or materials as required by 35 U.S.C. § 287, Sonos's damages are barred, in whole or in
2 part.

3 ***Prosecution Laches***

4 One or more of the Asserted Patents are unenforceable, in whole or in part, against Google
5 under the doctrine of prosecution laches.

6 For example, Sonos's '033 patent was filed on April 19, 2019 and issued on September 15,
7 2020. The application that issued as the '033 patent is a continuation of U.S. Application No.
8 15/872,500, filed on January 16, 2018, which is a continuation of U.S. Application No. 14/520,578,
9 filed on October 22, 2014, which is a continuation of U.S. Application No. 13/341,237, filed on
10 December 30, 2011. For example, Sonos's '033 patent was filed on April 19, 2019 and issued on
11 September 15, 2020. The application that issued as the '033 patent is a continuation of U.S.
12 Application No. 15/872,500, filed on January 16, 2018, which is a continuation of U.S. Application
13 No. 14/520,578, filed on October 22, 2014, which is a continuation of U.S. Application No.
14 13/341,237, filed on December 30, 2011.

15 Sonos unreasonably delayed pursuing the claims of the '033 patent for approximately eight
16 years. Indeed, Sonos did not pursue claims directed at a "remote playback queue" until it filed the
17 '033 patent. Specifically, approximately eight years after the written description of the '033 patent
18 was filed as the '237 application and after collaborating with Google on the direct playback
19 integration using cloud queue technology, Sonos amended its claims to introduce the alleged notion
20 of a "remote playback queue." See, e.g., '033 prosecution history (November 1, 2019 amendment
21 adding notion of "remote playback queue"). The claims of the '033 patent issued with claims
22 reciting a "remote playback queue" on September 15, 2020, approximately two weeks prior to the
23 filing of this lawsuit. While Google contends that Sonos's '033 patent does not provide written
24 description support for the "remoted playback queue" amendment, to the extent Sonos disagrees
25 Sonos has not identified any reason why it could not have presented the claims earlier. The
26 specification and figures of the '033 patent are the same as those filed in the continuation
27 applications that the '033 patent claims priority to, and Sonos pursued over one overlapping claims
28 in the nearly eight years before it pursued the "remote playback queue" claims.

1 As another example, Sonos's '966 patent was filed on April 12, 2019 and issued on
2 November 5, 2019. The patent is a continuation of U.S. patent application Ser. No. 15/130,919, filed
3 on April 15, 2016, entitled "ZONE SCENE ACTIVATION," which is a continuation of U.S. patent
4 application Ser. No. 14/465,457, filed on August 21, 2014, entitled "METHOD AND APPARATUS
5 FOR UPDATING ZONE CONFIGURATIONS IN A MULTI-ZONE SYSTEM," which is a
6 continuation of U.S. patent application Ser. No. 13/896,829, filed on May 17, 2013, entitled
7 "METHOD AND APPARATUS FOR UPDATING ZONE CONFIGURATIONS IN A MULTI-
8 ZONE SYSTEM," which is a continuation of U.S. patent application Ser. No. 11/853,790, filed
9 September 11, 2007, entitled "CONTROLLING AND MANIPULATING GROUPINGS IN A
10 MULTI-ZONE MEDIA SYSTEM," which claims priority to U.S. Provisional Application No.
11 60/825,407 filed on September 12, 2006.

12 As a result of Sonos's unexplained and unreasonable delay, Google has been prejudiced.
13 For example, Google invested time and resources in the development of the accused cloud queue
14 technology and its collaborations with Sonos based on its understanding that Sonos would not claim
15 for itself rights in the technology given that Sonos was aware Google planned to utilize that
16 technology with its own products and with other partners. Sonos's silence and years of delay in
17 ultimately pursuing claims that it now contends to cover this technology is highly prejudicial to
18 Google.

19 Google further incorporates by reference Google's Answer and Counterclaims to Sonos,
20 Inc.'s Third Amended Complaint (Dkt. 223), Google's Invalidity Contentions and any supplements
21 thereto, and the expert reports of Samrat Bhattacharjee and Dr. Dan Schonfeld. Pursuant to Rule
22 33(d) of the Federal Rules of Civil Procedure, in addition to the documents cited above, Google
23 further refers Sonos to the following non-exhaustive list of additional documents containing
24 information responsive to this interrogatory: Pursuant to Rule 33(d) of the Federal Rules of Civil
25 Procedure, in addition to the documents cited above, Google further refers Sonos to the following
26 non-exhaustive list of additional documents containing information responsive to this interrogatory:
27 GOOG-SONOSWDTX-00053819-53956, GOOG-SONOSNDCA-00070533-71314, GOOG-
28 SONOSNDCA-00073410-00075526, GOOG-SONOS-NDCA-00075636-92754, GOOG-SONOS-

1 NDCA-00113698-115224, GOOG-SONOSNDCA-00116343-00116429, GOOG-SONOSNDCA-
2 00117800, and any other document cited in this supplemental response.

3 **INTERROGATORY NO. 20:**

4 Separately for each Asserted Claim of each Patent-In-Suit, describe in detail the complete
5 legal and factual basis for any contention by Google that the secondary considerations of
6 nonobviousness (including, but not limited to commercial success, long-felt need, failure of others,
7 unexpected results, initial skepticism, copying, industry recognition, or widespread adoption) do not
8 support the nonobviousness of each such claim, including but not limited to: a detailed description
9 of whether Google denies that products embodying the Asserted Claims of the Patents-In-Suit,
10 including, inter alia, the Sonos Products, have been a commercial success or contends that there is
11 no nexus between such commercial success and the Asserted Claims of the Patents-In-Suit; and a
12 detailed description of whether Google denies that there was any long-felt need, failure of others,
13 unexpected results, initial skepticism, copying, industry recognition, or widespread adoption for the
14 subject matter covered by the Asserted Claims of the Patents-in-Suit; and an identification of all
15 facts supporting or refuting any such contentions, all persons knowledgeable of these facts
16 (including every person whose knowledge or opinion is relied upon as a basis for Google's
17 obviousness assertions, the opinion or substance of his/her knowledge, and the entire basis of that
18 knowledge or opinion), and all documents and things, including the Bates number(s) of such
19 documents and things, concerning Google's position on secondary considerations of
20 nonobviousness.

21 **OBJECTIONS:**

22 Google incorporates by reference all of its General Objections as if fully set forth herein.
23 Google objects to this interrogatory on the grounds that it is vague, ambiguous, unclear as to
24 information sought, and lacking sufficient particularity to permit Google to reasonably prepare a
25 response with respect to the undefined terms "commercial success, long-felt need, failure of others,
26 unexpected results, initial skepticism, copying, industry recognition, or widespread adoption,"
27 "nexus," "knowledgeable," "knowledge or opinion", "is relied upon," "opinion or substance," and
28

1 “entire basis of that knowledge or opinion.” Google further objects to this interrogatory to the extent
2 that it assumes the existence of hypothetical facts that are incorrect or unknown to Google.

3 Google also objects to this interrogatory as overbroad, burdensome, and not proportional to
4 the needs of the case, including to the extent it (i) seeks information “[s]eparately for each Asserted
5 Claim of each Patent-In-Suit,” (ii) seeks identification of “all persons knowledgeable” of certain
6 facts,” and (ii) seeks “all documents and things” concerning Google’s position on secondary
7 considerations of nonobviousness. Google further objects to this interrogatory to the extent it seeks
8 information that is not reasonably accessible or that is not within Google’s possession, custody, or
9 control. Google further objects to this interrogatory as overbroad and unduly burdensome to the
10 extent that it seeks information that is publicly available, not uniquely within the control of Google,
11 or is equally available to Sonos. Google additionally objects to this interrogatory to the extent it
12 seeks communications and information protected from disclosure by the attorney-client privilege
13 and/or attorney work product doctrine. Google further objects to this interrogatory to the extent it
14 seeks confidential and/or proprietary business information. Google also objects to this interrogatory
15 to the extent that it premature seeks expert discovery, opinion, and/or testimony. Google also objects
16 to this interrogatory on the grounds that it seeks information that is obtainable through less
17 burdensome and more convenient forms of discovery. Google further objects to this interrogatory
18 to the extent it seeks information that is unnecessarily cumulative or duplicative of information
19 sought by other discovery, including Request for Production No. 41.

20 Google further objects to this interrogatory to the extent that it purports to seek ESI before
21 Sonos has shown good cause for such ESI and before the parties have agreed on a procedure for
22 doing so in accordance with the Court’s OGP.

23 **RESPONSE:** Subject to and without waiving the foregoing General and Specific
24 objections, Google responds, as follows:

25 Google objects to this interrogatory on the grounds that it is premature. Sonos has failed to
26 meet its burden of demonstrating that it practices the patents-in-suit. Google will supplement its
27 response when Sonos has adequately alleged secondary considerations of non-obviousness tied to a
28 specific product or products that embody the claimed features.

SUPPLEMENTAL RESPONSE: Google maintains the General and Specific objections set forth above. Subject to and without waiving the foregoing General and Specific objections, Google responds, as follows: None of the supposed indicia or evidence that Sonos has identified with respect to secondary considerations of non-obviousness in its supplemental response to Google's Interrogatory No. 4 support a finding that the claimed inventions are non-obvious.

'615 and '033 patents

Sonos alleges that there is industry praise for the invention claimed by the '615 and '033 patents, identifying certain supposed “praise for the Google Play Music app embodying Sonos’s technology that is the subject of the '615 and '033 Patents.” Preliminarily, the Court has already found that the '615 patent is invalid in light of the prior art, thus confirming the obviousness of that patent and evincing the obviousness of the related '033 patent.

Moreover, to show “praise by others,” there must be a nexus between the industry praise and the patented technology. Sonos’s response is thus forced to point to comments regarding Google Play Music and YouTube Music given that it has asserted that none of its products practice the ’033 patent—yet neither of those Google products embody the infringing technology. Notwithstanding that such praise therefore fails to demonstrate any secondary indicia of non-obviousness. The comments Sonos identifies do not praise the *claimed invention* of the ’033 patent and instead merely discuss direct playback streaming and/or casting of music at a high-level. *See, e.g.*, SONOS-SVG2-00062302-62305 at 302 (comment that Google Play Music will be able to “stream songs” to speakers); SONOS-SVG2-00062306-62312 at 307 (noting that Google Play Music can now “bypass the Sonos app completely” and “beam” tunes right to a speaker). None of these comments praise, for example, media playback using “a remote playback queue” from a “cloud-based media service”—as required by claim 1 of the ’033 patent. Similarly, the comments expressing apparent “frustration” over the missing casting function for the YouTube Music app merely mentions the direct playback generally, which it is indisputably *not* the claimed invention of the ’033 patent. *See, e.g.*, SONOS-SVG2-00062113-0062251 at 118 (complaining about the lack of ability to “cast[] directly from YT music app to Sonos”).

1 Sonos alleges that there was “skepticism within Sonos around the time of the claimed
 2 inventions of the ’615 and ’033 Patents, such as skepticism regarding the likely success or adequacy
 3 of Sonos’s claimed invention.” First, the document Sonos cites was created by its own employee
 4 and inventor of two of the Asserted Patents, Robert Lambourne, regarding the “Play-To”
 5 functionality. See SONOS-SVG2-00026286. Preliminarily, reliance on an internal, non-public email
 6 from the patent’s inventor himself—who is clearly not an unbiased observer—cannot form the basis for
 7 evidence of “skepticism by experts;” indeed, this would allow every inventor to create a self-serving
 8 record to refer back to in the future. Moreover, the “Play-To” functionality was not a specific protocol
 9 or solution, it was merely a theoretical way that multiple implementations could deliver playback to
 10 Sonos devices. See, e.g., GOOG-SONOSNDCA-00116343; N. Millington Dep. Tr. at 166:9-12
 11 (“[T]he idea behind play to Sonos is you could use an app other than the . . . Sonos controller app
 12 to be able to basically have Sonos act as the virtual speakers for that app”). Second, the commentary
 13 in the document does not demonstrate “skepticism of experts” regarding the viability of the
 14 invention—instead, Mr. Lambourne merely ponders that there may be consumer confusion if a user
 15 is able to play music from either the Sonos controller app or directly from a music app and that such
 16 a functionality may render Sonos’s app obsolete. GOOG-SONOSNDCA-00116343

17 Finally, evidence of “simultaneous invention” may also be a secondary indicia tending to
 18 show obviousness, and there were many individuals and companies who were working in the same
 19 space as Sonos during the time frame of the purported invention. As Sonos itself recognized,
 20 Apple’s Airplay feature already provided the ability to transfer and/or control playback on a
 21 playback device from a control device. See *id.* (“To the extent that Sonos claims to have “invented”
 22 anything or solved any purported problem, these companies and individuals (among others)
 23 invented the same thing and solved the same problem in the same way at around the same time (or
 24 earlier). See GOOG-SONOSNDCA-00116343.

25 ***’885 and ’966 Patents***

26 Sonos also alleges that there was evidence of industry praise for “the Sonos S2 app
 27 embodying Sonos’s technology that is the subject of the ’885 Patent.” But to show “praise by
 28 others,” there must be a nexus between the industry praise and the patented technology. The

1 statements Sonos points to regarding the Sonos S2 app merely discuss the ability to group speakers
2 generally—they do not praise invention or mention the claimed “standalone mode,” “transition,”
3 “zone scene,” joining speakers to multiple groups, or any of the other specific claimed features. *See*,
4 *e.g.*, SONOS-SVG2-00062361-62364 at 363 (noting the Sonos S2 apps “ability to save a group of
5 speakers as a preset); SONOS-SVG2-00062279-62291 at 285 (expressing excitement “about the
6 ability to save ‘room groups’”). Sonos’s statements regarding Google’s products “embodying
7 Sonos’s technology that is the subject of the ’885 and ’966” suffer from the same fatal flaw. *See*,
8 *e.g.*, SONOS-SVG2-00062338-62341 at 338 (touting Google’s “speaker group” functionality”;
9 SONOS-SVG2-00062266-62275 at 266 (same). Moreover, the accused products do not embody
10 the ’885 and ’966 patents. As such, there is no nexus between any secondary consideration
11 regarding praise and the claimed invention.

12 Sonos also identifies what it considers “skepticism” of the alleged invention in the ’885
13 patent. Once again, Sonos does not identify any evidence that tracks or identifies the claimed
14 “standalone mode,” “transition,” “zone scene,” joining speakers to multiple groups, or any of the
15 other specific claimed features. As such, there is no nexus between any secondary consideration
16 regarding skepticism and the claimed invention. Further, the alleged “skepticism” Sonos identifies
17 is only from a discussion between employees at Sonos (SONOS-SVG2-00026888-26889 at 889),
18 and therefore is not industry or expert skepticism—or even third-party skepticism. Nor does the
19 evidence Sonos cite include a showing of technical infeasibility or manufacturing uncertainty.
20 Merely recognizing that zone groups were “complex” and that Sonos would need to make the UI
21 simple do not suffice to show skepticism, particularly given that Sonos has admitted that its own
22 products do not practice the claimed inventions. *Id.* As a result, any discussion of Sonos’s own
23 products cannot support the finding of a nexus to the invention.

24 Google further incorporates by reference Google’s Answer and Counterclaims to Sonos,
25 Inc.’s Third Amended Complaint (Dkt. 223), Google’s Invalidity Contentions and any supplements
26 thereto, and the expert reports of Samrat Bhattacharjee and Dr. Dan Schonfeld.

27 **INTERROGATORY NO. 21:**
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